will most likely cause reduction in attendance at events held at the Wisconsin Exposition Center which will significantly impact our revenues.

In addition to attendees, we have thousands of exhibitors and vendors who exhibit at the shows at the Expo Center. The M1 alternative would take vendors driving box trucks, semis and vehicles with trailers on a circuitous route through residential neighborhoods, city streets and u-turns. The current route off the  $84^{\rm th}$  St ramp is easy, direct and efficient.

I understand there are future development plans under consideration on the corner of 84th and Greenfield and along Greenfield Ave which may include a hotel, restaurant and retail. The 84th St ramp and exit is the main thoroughfare from the Interchange and provides easy on/off freeway access, greater marketing opportunities and exposure along this street that the M1 alternative.

We hope you take our concerns into consideration and please keep us apprised of developments. If you like to discuss in greater detail please feel free to contact me at 414.727.8845.

Singerely

Sandra Lange

President



April 1, 2008

Wisconsin Department of Transportation

Attention: Carrie Cooper, WisDOT and Charlie Webb, Forward 45

Subject: Zoo Interchange

The Milwaukee Metropolitan Sewerage District (District) submits the following comments for consideration by the Wisconsin Department of Transportation (WisDOT) as it undertakes an environmental assessment and design for the above-referenced project.

Flooding is a risk each generation re-discovers. The regional floods of June 21-22, 1997 and August 5–6, 1998, confirmed our inability to physically control flooding. Flooding is a risk which we try to manage, but can never control.

# Impervious material causes peak flood runoff

In the District service area, there is a reasonably close causal relationship between impervious surfaces and peak flood runoff. That is, in the highly urbanized area, the environmental effect of miles new imperious surface is destructive flash flooding. The regional management goal is to slow runoff and reduce the peak flow.

The District's approach to regional flood risks is uniform across all watersheds in the service area and is comprehensive. The regional approach has been promulgated as "Chapter 13" of the District's Rules.

All development or redevelopment that adds more than one half acre of impervious surface must provide compensatory "retention." The reasonably available methods to minimize peak flood runoff from new imperious surface are listed, in order of preference, in section 13.11(2), MMSD Rules:

- (a) Preservation of the natural features of development sites, including natural storage and infiltration characteristics;
- (b) Preservation of existing natural streams, channels, and drainage ways;
- (c) Minimization of new impervious surfaces;

- (d) Conveyance of stormwater in open vegetated channels;
- (e) Construction of structures that provide both quantity and quality control, with structures serving multiple sites being preferable to structures serving individual sites; and,
- (f) Construction of structures that provide only quantity control, with structures serving multiple sites being preferable to structures serving individual sites.

# Trans 401 does not address Peak Flooding from new Impervious Transportation Surfaces.

WisDOT Trans 401 addresses only water quality problems arising from transportation project construction based on the "2 year 24 hour storm," more accurately the "50% annual probability storm." Trans 401 is about water quality and pollutants in frequent stormwater runoff, not the destructive effects of out-of-bank flooding.

#### Common law of Reasonable Use

Highway construction has followed the "common enemy" rule which held that water was the common enemy of all to be runoff without liability. The common enemy rule was abandon in favor of the "reasonable use" doctrine in 1974 (*State v. Deetz*).

The reasonable use rule is: one must "do no harm" to others when draining water down gradient. Common law "reasonable" management of surface water is a somewhat flexible duty, but more care must be exercised in a highly urbanized and largely imperious area.

#### Reasonable Runoff is a Rate not to exceed 0.5 cfs/acre

The District (and the 28 government units served by the District) have adopted a bright line meaning to "reasonable use." Reasonable Use means a maximum runoff release rate of 0.5 cubic feet per second per acre for the 1% probability 24 hour (or 100 year recurrence interval) storm event. The technical support for the runoff rate is voluminous and available upon request.

0.5 cfs/acre provides a level of protection against increasing the existing peak flood flow from the "100 year 24 hour storm" event (5.88 inches), more correctly called the "1% annual probability storm."

Storms greater than the 1% probability will increase the peak flood flow causing harm, but are uncontrollable, an "Act of God." An Act of God is an unusual and extraordinary manifestation of the forces of nature which reasonable human foresight, pains, and care could not prevent. See, *In Re: Flood Litigation*, 216 W.Va. 534, 607 S.E.2d 863 (W. Va. Sup Ct. 2004), <a href="www.state.wv.us/wvsca/docs/fall04/31688.htm">www.state.wv.us/wvsca/docs/fall04/31688.htm</a>, (flood victims suing logging and mining operations that altered the natural state of the land causing an

"unreasonable" increase in peak flood flows), contra, *Estate of Donnell et at.*, v. City of Milwaukee, (unpublished opinion, WI Ct. Apps, 1991) (downhill landowners can't prove a Target Store parking lot, less than 1% of the watershed, caused "substantial" damage during a 500 year flood event).

Region flood means the peak flow and peak elevation of water with a 1% probability of occurring during any one year, considering rainfall time and intensity patterns, rainfall duration, area distribution, antecedent moisture, and snow melt.

Without the 0.5 cfs/acre reasonable runoff rate, peak flood flow would increased by 30% in some streams by 2020. The metropolitan area is expected to achieve "full build out" by 2050. Therefore, reasonable care must be taken as new impervious surfaces are added to minimize the adverse effects of peak flood flows. The duty of care applies equally to redevelopment of existing imperious areas.

# The Reasonable Use doctrine applies to DOT projects

In 1977, the Legislature enacted §88.87 regarding the impact of highways on pre-existing drainage, and included the WisDOT.

Section 88.87, decrees that transportation projects **shall not** impede the general flow of water in any **unreasonable matter so as to cause** either an unnecessary accumulation of waters flooding or water-soaking uplands, or an unreasonable accumulation and **discharge of surface waters flooding** or water-soaking low lands.

## The interplay of Environmental Assessments and the reasonable use duty

Section 1.11, Wis. Stats., directs state agencies to bear in mind (to the fullest extend possible) the foreseeable adverse environmental impacts arising from implementation of each agency's mission, and mitigation alternatives.

The common law has evolved from the common enemy rule to the reasonable use doctrine because the hydrologic models can foresee the watershed runoff changes from development and more imperious land area. The cause and effect relationship is plain in the context of the highly urbanized Milwaukee Metropolitan area.

WDOT should consider measures to retain and show the rate of runoff when adding new imperious areas just as every other public and private developer is required to do follow the reasonable runoff rate (0.5 cfs/acre).

#### It would be arbitrary to ignore regional flood management

Sometime local policies are parochial, selfish or matters of taste. Flood management for the Milwaukee Metropolitan area is none of that. The runoff rate and possible management practices are state of the art, based on the best available science and will effective "shave the peak" off flood flows.

As additional protection, the District has a watercourse program. The program has removed property that is flood prone and has build structures to protect other flood prone communities. Parks have been re-landscaped for detention of flood waters and detention facilities have been built. The estimated costs of the District's watercourse remediation is \$350 million for the Menomonee River Watershed in which this roadway is located.

The Smart Growth Comprehensive Planning law, §1.13, Wis. Stats., encourages state agency to pursue their mission consistent with a range of "smart growth" actions. One smart action is local laws adopted to balance individual property rights with community interests. The Milwaukee Metropolitan regional flood management approach is undertaken to protect property, the current economic base and public welfare from the devastating risks of flash flooding.

Land use established prior to 2001 made the flood risk real. After 2002, attention to reducing runoff in every development and redevelopment is essential for the overall goal of not making the flood risk worst. WisDOT can pursue its transportation mission consistent with the local smart growth requirement to "do no harm" from surface water runoff.

# Significant New Impervious Surface

This project is expected to add significant of new impervious surfaces which will cause increases in the peak regional flood flows, an adverse environmental legacy. WisDot must identify which mitigating methods are most feasible to prevent increases in peak flood flows from any new impervious surfaces.

### Conclusion

The District is a "cooperating agency" that has a special expertise (hydrologic assessment) with respect to regional flood management, a relevant environmental effect generated by transportation mission of WisDOT. §1.11(2)(d) and Ch. Trans 400.04(4), Wis. Adm. Code. WisDOT has a duty to "consult" with the District on the regional flood impacts and mitigation caused by planned transportation projects, individually and cumulatively. We hope the consultation will lead to a better understanding of the swift dynamics of urban flash flooding. WisDOT can greatly assist by considering these factors early in the design process.

Respectfully submitted,

Debra Jensen

Planning Services Supervisor

Attachments



Jim Doyle, Governor Frank J. Busalacchi, Secretary

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May 20, 2008

Debra Jensen Planning Services Supervisor Milwaukee Metropolitan Sewage District 206 W. Seeboth Street Milwaukee, WI 53204-1446

Dear Ms. Jensen,

This letter is in response to the letters you sent to our regional office via e-mail on April 4<sup>th</sup>, 2008, regarding the following projects: Airport Spur, 27<sup>th</sup> & Layton, STH 167, and the Zoo Interchange. Thank you for sharing your opinion and the basis for your opinion. The Department has reviewed the referenced administrative codes and state statutes and finds no new information that would change the Department's position. Our past and present practices are consistent with State law.

While the Department is not required to follow MMSD Chapter 13 rules, we have always taken, and will continue to take into consideration both quantity and quality impacts, no matter how small or big the project is. As you may know, the Department must follow its own set of rules for its transportation projects, which have the force and effect of law.

The Department's long-standing policy is to cooperate with local political subdivisions in every way possible in carrying out its program responsibilities, and this includes accommodating local concerns whenever possible and consistent with the statewide objectives involved. We have always and will continue to practice sound engineering judgment in properly handling our storm water runoff, making sure we do not have any significant upstream or downstream flooding impacts.

As always, we will be happy to meet with you to discuss our transportation projects, your concerns and any particular locations within your District that you feel are in need of particular attention. The Department has always been good neighbors with the communities where our transportation improvements are situated. Rest assured the Department will properly evaluate and implement reasonable non-cost prohibitive storm water management practices to the maximum extent practicable on our transportation improvement projects.

Sincerely,

Don Berghammer, P.E.

WisDOT SER Environmental, Utility & Railroad Services Supervisor

Cc: Dewayne Johnson, P.E., SER Director

Claudia Peterson, SER Technical Services Manager

Roberto Gutierrez, P.E., SER SE Freeway Group Project Development Chief

John Oimoen, P.E., SER North Group Project Development Chief

Donna Brown, SER Zoo Interchange Manager

Dan Scudder, P.E., Bureau of Equity & Environment Chief

Rodney Taylor, P.E., State Drainage Design Engineer

Reem Shana, P.E., SER Storm Water and Erosion Control Engineer

Kurt Flierl, P.E., NS Corridor Project Manager

Gary Metzer, P.E., STH 167 Project Manager

Carrier Cooper, Zoo I.C. Environmental Specialist